

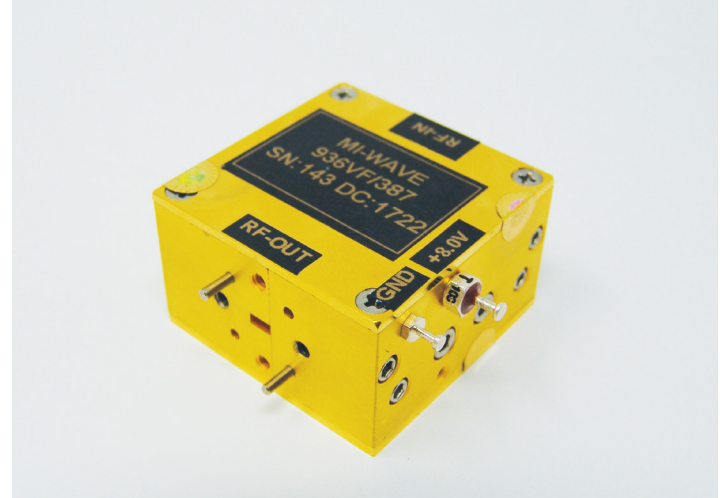
## Description

Mi-Wave's 93(x) Series Active Multipliers utilize high performance MMIC chips for frequency multiplication and amplification. The multipliers offer moderate conversion gain with output frequency covering 18 to 140 GHz in six waveguide bands. The X2, X3, X4, and X6 are offered as standard multiplication factors. The input power requirement for these multipliers is +5 to +10 db. While SMA or K female coaxial connector is equipped for input and waveguide for output interface, waveguide input is available as an option for U, V, E, and W Band multipliers.

- High Output Power
- Up to Full Waveguide Operation
- Moderate Conversion Gain
- Frequency up to 140 GHz
- Single Power Supply

## Applications

- Frequency Extenders
- Test Set
- Local Oscillators
- Sub-systems



### Technical Specifications (typical)

Output Freq. (GHz)	Multiplying Factor	Input Freq. (GHz)	Output Power (dBm, Typ)	Bandwidth (GHz)	Output Waveguide	Input Connector
18.0–26.5	x2	9.0–13.25	10 to 30	±2 to Full	WR-42, K, F	SMA (F)
26.5–40.0	x2	13.25–20.0	10 to 27	±2 to Full	WR-28, K, F	SMA (F)
	x4	6.625–10.0	10 to 27	±2 to Full	WR-28	SMA (F)
33.0–50.0	x2	16.5–25.0	10 to 25	±2 to Full	WR-22	SMA (F)
	x4	8.25–12.5	7 to 25	±2 to Full	WR-22	SMA (F)
40.0–60.0	x4	10.0–15.0	7 to 20	±2 to Full	WR-19	SMA (F)
50.0–75.0	x4	12.5–18.75	7 to 20	±2 to Full	WR-15	K (F)
60.0–90.0	x6	10.0–15.0	7 to 25	±2 to Full	WR-12	K (F)
75.0–110.0	x6	12.5–18.33	5 to 20	±2 to Full	WR-10	SMA (F)

Please consult Mi-Wave for specifications above 110 GHz.

\* High power outputs are available in narrow bandwidths. Please consult

### Operating Specifications

RF Input Power	+15 dBm, Max.
Storage Temperature	-10 C to +60 C
Operating Temperature	0 C to +50 C
Bias Requirements: (optional) Diode	+8 to +12Vdc @ tbd MA

### Ordering Information

